# Correspondence

Quality of life measurement

SIR

Professor Calman's concept of a gap between a subject's expectations and achievements is very helpful in enhancing understanding and measurement of Quality of Life (1).

May we suggest another gap which reflects a further component of Quality of Life? With respect to the accompanying figure, Calman's suggestion and Cribb's subsequent commentary (2) refer to gap 'A' and its inverse relationship with Quality of Life, ie the smaller the gap, the greater patient satisfaction and hence presumed higher quality of life. An essential element of measuring this gap is the patient's subjective experience and record of his illness and dependency.

Gap 'B' is that between the patient's actual achievements and his or her potential achievements. Andrews and Stewart (3) showed in patients seen in a day hospital following in-patient care in a stroke unit, that there was an important difference between the patient's potential achievements (as shown in the day hospital Activities of Daily Living [ADL] objective assessments) and in the patient's actual achievements as measured by the same observers when assessing these patients at home. Channer et al (4) showed that in patients presenting with chest pain but found not to have any evidence of ischaemic heart disease, including a normal response to an ECG-exercise test, the explanation of this failed to prevent further chest pain in 70 per cent of the subjects.

Both these studies are examples of a gap between the patients' actual achievements (poor ADL function and persistent restricting chest pain, respectively) and the patients' potential achievements. Both led to diminution of quality of life: in the first study – diminution according to the external observers; in the second study,

A   B

Expectations   Actual   Potential
                      Achievements   Achievements
(See letter for definitions)
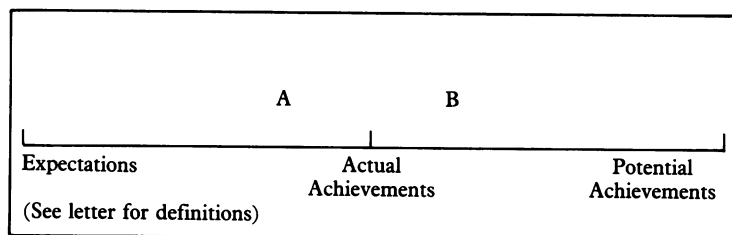
diminution according to the subjects' own experiences. By potential achievements, we do not mean those that are theoretically possible but those shown actually to occur albeit under certain conditions. Wood (5) drew attention to the importance of increasing the patient's appraisal and coping skills to enhance quality of life rather than just aiming at increasing patient satisfaction and happiness.

We therefore suggest that, where possible, quality of life measurements should include reference to the patient's potential achievements. This has the advantage of not only clarifying quality of life but indicates ways of improving this, if desired.

References

(1) Calman K C. Quality of life in cancer patients – an hypothesis. *Journal of medical ethics* 1984; 10: 124–127.
(2) Cribb A. Quality of life – a response to K C Calman. *Journal of medical ethics* 1985; 11: 142–145.
(3) Andrews K, Stewart J. He can but does he? *Rheumatology and rehabilitation* 1979; 18: 43–48.
(4) Channer K S et al. Failure of a negative exercise test to reassure patients with chest pain. *Quarterly journal of medicine* 1987; 63: 315-322.
(5) Wood C. Are happy people healthier? Discussion paper. *Journal of the Royal Society of Medicine* 1987; 80: 354–356.

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On sterilising severely mentally handicapped people

SIR

Raaman Gillon's admirable editorial (June 1987) omits an argument that is persuasive against such sterilisations. Especially in consideration of his words about that 'society whose morality functions as a dread warning of the depths to which human behaviour can sink', we must acknowledge that the possibility of pregnancy may afford some protection to mentally handicapped people, against those who might otherwise take sexual advantage of them. The knowledge that sterilisation had removed such a possibility might also remove a restraint to exploitation, and thus, indeed, serve ultimately against the interests of the mentally handicapped person.

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